REMARKS

Claims 1, 16-18, 25, 33, 40, 50 and 53-75 were pending and under consideration. With this amendment and response, Claims 1, 16-18, 25, 33, 40, 50 and 53-75 have been canceled. New Claims 76-81, 83-86, 90-95 and 98-99, 101 and 103 have been added. Claims 82, 87-89, 96-97, 100 and 102 are reinstated previously pending claims with claim dependency amended. After entry of the instant amendment Claims 76-103 are pending and under consideration. For the PTO's convenience, a clean version of the amended paragraphs of the specification is provided at Exhibit A.

I. AMENDMENT TO THE SPECIFICATION

The specification has been amended to correct informalities as pointed out by the PTO's objections to the specification. The Table of Contents at pages i-iii, has been canceled. The SEQ ID NOs at page 65, lines 4-6 have been amended to recite SEQ ID NOs: 230, 231 and 232. Applicants have amended previously numbered Tables IX and X to Tables VIII and IX, respectively, to correct the omission of Table VIII. In addition, Applicants have amended the specification referencing the incorrectly numbered tables. Finally, Applicants have amended the specification to correct minor typographical errors, namely the spelling of tryptophan and naphthylalanine.

Applicants submit that the patent application transmittal form, filed, May 25, 2001, provided instructions to amend the specification to include priority information. Applicants thank the PTO for pointing out the informalities of the specification. Applicants submit that the amendments do not introduce new matter and are fully supported by the specification as originally filed. Applicants respectfully request that the objections be withdrawn and the amendments be entered.

II. THE NEW CLAIMS

New Claim 76 recites, in relevant part, an ApoA-I agonist according to formula I, wherein at least one residue of the peptide or peptide analogue is a D-enantiomeric residue as described in the specification at page 44, lines 23 to 26. New Claim 76 also recites Z_1 is H_2N- or RC(O)NR-, Z_2 is -C(O)NRR, -C(O)OR or -C(O)OH; each R is independently -H, (C_1-C_6) alkyl, (C_1-C_6) alkenyl, (C_1-C_6) alkynyl, (C_5-C_{20}) aryl, (C_6-C_{26}) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl or a 1 to 4-residue peptide or peptide analogue in which one or more bonds between residues 1 through 4 are independently a

substituted amide, an isostere of an amide or an amide mimetic. In addition, new Claim 76 recites a 14 to 21-residue deleted peptide or peptide analogue according to formula (I) in which at least one and up to eight of residues X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, X_{15}, X_{16}, X_{17} and X_{18} are optionally deleted; or (iii) an 18 to 22-residue altered peptide or peptide analogue according to formula (I) in which at least one of residues X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9, X_{10}, X_{11}, X_{12}, X_{13}, X_{14}, X_{15}, X_{16}, X_{17} and X_{18} is conservatively substituted; or an N-terminally blocked form, a C-terminally blocked form or an N- and C-terminally blocked form of formula (I). Support for new Claim 76 may be found, for example, in Claim 1 as originally filed and in the specification, for example, at page 44, lines 23-26; page 47, line 23 to page 48, line 16; page 50, line 17 to page 51, line 17.

New Claims 77-81 and 83 and reinstated Claim 82 recite various forms of the peptide or peptide analogue of Claim 76. Support for Claims 77-83 may be found, for example, in Claims 1, 3 and 10 to 14 as originally filed.

New Claims 84-86 recite various multimeric ApoA-I agonists wherein HH is a peptide or peptide analogue of Claim 1, the deleted peptide or peptide analogue according to Claim 1 or the altered peptide or peptide analogue according to Claim 1. Support for new Claims 84-86 can be found in the specification, for example, at page 52, lines 9 to 22, page 58, lines 18 to 27, and page 59, lines 6 to 13.

Reinstated Claims 87-89 and new Claims 90-91 recite various embodiments of the multimeric ApoA-I agonists of Claims 84, 85 and 86. Support for Claims 87-91 can be found, for example, in Claims 19-22 as originally filed.

New Claims 92-93 recite ApoA-I agonist compound-lipid complexes. Support for Claims 92-93 can be found, for example, in original Claims 25 and 30.

New Claim 94 recites a pharmaceutical composition comprising an ApoA-I agonist compound according to Claim 76, 84, 85 or 86 and a pharmaceutically acceptable carrier, excipient or diluent. Support for new Claim 94 can be found, for example, in Claim 33 as originally filed.

New Claim 95 recites a pharmaceutical composition comprising an ApoA-I agonist compound-lipid complex wherein the ApoA-I agonist compound-lipid complex is comprised of an ApoA-I agonist compound according to Claim 76, 84, 85 or 86, a lipid and a pharmaceutically acceptable carrier, excipient or diluent. Support for new Claim 95 can be found, for example, in Claim 38 as originally filed.

Reinstated Claims 96 and 97 recite the pharmaceutical composition of Claim 95 wherein the lipid is sphingomyelin and is a lyophilized powder. Support for Claims 96

and 97 can be found, for example, in Claim 39 as originally filed, and in the specification, for example, at page 80, lines 26-28.

New Claims 98-99, 101 and 103 and re-instated Claims 100-102 recite methods of treating a subject using ApoA-I agonists. Support for Claims 98-103 can be found, for example, in Claims 40-52 as originally filed.

Applicants submit that Claims 76-103 are fully supported by the specification and do not introduce new matter. Applicants respectfully request entry of Claims 76-103.

III. REJECTIONS UNDER 35 U.S.C. §112, FIRST PARAGRAPH

i. Claims 1, 16-18, 25, 33, 40, 50 and 53-75

Claims 1, 16-18, 25, 33, 40, 50 and 53-75 stand rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claims 1, 16-18, 25, 33, 40, 50 and 53-75 are cancelled rendering the rejection moot.

New Claim 76 recites, in relevant part, an ApoA-I agonist compound according to formula I, wherein at least one residue of the peptide or peptide analogue is a D-enantiomeric residue. Applicants submit that there is ample support in the specification for new Claim 76.

The specification describes that in certain preferred embodiments that are suitable for oral administration to animal subjects, the peptides may advantageously be composed of at least one D-enantiomeric amino acid. (page 44, lines 23-26). New Claim 76 is drawn to this preferred embodiment.

Applicants submit that Claims 76-101 meet the requirements under 35 U.S.C. §112, first paragraph and respectfully request that the rejection be withdrawn.

ii. Claim 1, Z1

Claim 1 stands rejected as allegedly lacking support for the Z_1 group that is RRN-. Claim 1 has been cancelled rendering the rejection moot. Applicants submit that the specification supports Z_1 that is RRN-. However, merely in order to expedite prosecution, new Claim 76 recites Z_1 is H_2N-, or RC(O)NR-.

Applicants respectfully request that the rejection be withdrawn.

iii. Claim 1, R group

Claim 1 stands rejected as allegedly lacking support for an R group having 5-7 residues. Claim 1 has been cancelled rendering the rejection moot. In order to expedite prosecution, new Claim 76 recites each R is independently -H, (C_1-C_6) alkyl, (C_1-C_6) alkenyl, (C_1-C_6) alkynyl, (C_5-C_{20}) aryl, (C_6-C_{26}) alkaryl, 5-20 membered heteroaryl or 6-26 membered alkheteroaryl or a 1 to 4-residue peptide or peptide analogue in which one or more bonds between residues 1 through 4 are independently a substituted amide, an isostere of an amide or an amide mimetic. Support for new Claim 76 can be found in Claim 1 as originally filed.

Applicants respectfully request that the rejection be withdrawn.

IV. REJECTIONS UNDER 35 U.S.C. §112, SECOND PARAGRAPH

Claims 1, 16-18, 25, 33, 40, 50 and 53-75 stand rejected as allegedly indefinite.

i. Claim 1, peptide length

The PTO contends that Claim 1 part (i) is indefinite as to peptide length. Applicants respectfully disagree. A claim is definite if one skilled in the art would understand the bounds of the claim when read in light of the specification. *LNP Engineering Plastics, Inc. v. Miller Waste Mils, Inc.*, 275 F.3d 1347, 61 USPQ2d 1193 (Fed. Cir. 2001).

Claim 1 has been canceled rendering the rejection moot. New Claim 76, part (i) recites, in relevant part, an 18 to 22- residue ApoA-I peptide or peptide analogue which comprises formula (I). Formula (I) is Z_1-X_1-X_2-X_3-X_4-X_5-X_6-X_7-X_8-X_9-X_{10}-X_{11}-X_{12}-X_{13}-X_{14}-X_{15}-X_{16}-X_{17}-X_{18}-Z_2. Z_1 and Z_2 are, *inter alia*, a 1 to 4-residue peptide or peptide analogue in which one or more bonds between residues 1 through 4 are independently a substituted amide, an isostere of an amide or an amide mimetic. The ApoA-I agonist peptides of the invention are comprised of residues X_1-X_{18} with the Z_1 and Z_2 termini used as "end-cap" residues or segments, as is well known in the art and described in the specification, for example, at page 47, line 23 to page 48, line 16. ApoA-I agonist peptide or peptide analogues of 19, 20, 21 or 22 residues can be made by one of skill in the art simply by adding a total of 1 to 4 residues to formula (I) at either Z_1 or Z_2 or both, using the teachings of the specification to create a peptide that forms amphipathic α-helices in the presence of lipids. Thus, new Claim 76, part (i) allows one skilled in the art to understand the bounds of an 18 to 22-residue ApoA-I peptide or peptide analogue comprised of formula (I) when read in light of the specification.

Applicants submit that Claims 76-101 are not indefinite and respectfully request that the rejection under 35 U.S.C. §112, second paragraph be withdrawn.

ii. **Claims 16, 17, 18, 25 and 33; HH**

The PTO contends that Claims 16, 17, 18, 25 and 33 are indefinite as to the definition of HH. Claims 16, 17, 18, 25 and 33 have been cancelled rendering the rejection moot. New Claims 84-86 recite, in relevant part, each "HH" is independently a peptide or peptide compound according to Claim 1, the deleted peptide or peptide analogue according to Claim 1 or the altered peptide or peptide analogue according to Claim 1.

Applicants submit that new Claims 84-86 are not indefinite and respectfully request that the rejection be withdrawn.

iii. **Claims 40, 50, 71 and 75; antecedent basis**

The PTO contends that Claims 40, 50, 71 and 75 have no antecedent basis for the phrase "the ApoA-I agonist" in the claims. Claims 40, 50 and 75 have been cancelled rendering the rejection moot. New Claim 94 recites a pharmaceutical composition comprising a pharmaceutically acceptable carrier, excipient or diluent and an ApoA-I agonist compound according to Claim 76, 84, 85 or 86. New Claim 95 recites a pharmaceutical composition comprising an ApoA-I agonist compound-lipid complex wherein the ApoA-I agonist compound-lipid complex is comprised of an ApoA-I agonist compound according to Claim 76, 84, 85 or 86, a lipid and a pharmaceutically acceptable carrier, excipient or diluent.

Applicants submit that new Claims 94-95 meets the requirements under 35 U.S.C. §112, second paragraph, and respectfully request that the rejections be withdrawn.

CONCLUSION

Applicants submit that Claims 76-103 satisfy all the criteria for patentability and are in condition for allowance. An early indication of the same is therefore kindly solicited.

A Petition for Extension of Time accompanies this Amendment. Pursuant to 37 C.F.R. §1.136 (a)(3), the Commissioner is authorized to charge all other required fees, fees under 37 C.F.R. §1.17 and all required extension of time fees, or credit any overpayment, to Pennie & Edmonds LLP, U.S. Deposit Account No. 16-1150 (Order No. 9196-019-999).

Respectfully submitted,

Date: June 10, 2003

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Rahul Pathak (Reg. No.)
For Laura A. Coruzzi (Reg. No. 30,742)
PENNIE & EDMONDS LLP
1155 Avenue of the Americas
New York, New York 10036-2711
(212) 790-9090